

REMARKS

The claims in the application are 1-7 and Claims 8-12 added by the present Amendment.

Favorable reconsideration of the application as amended is respectfully requested.

A certified copy of priority Japanese application no. 2000-199081 together with a verified English translation thereof are enclosed.

Independent Claim 1 has been amended to recite the connection thread 2 interconnects the upper ground structure 1 and lower ground structure 1 as shown in Fig. 1 (reference is being made to preferred embodiments of the present invention illustrated in the drawings of the present application) and the conductive metal layer is constituted by plating of the three dimensionally knitted base material with at least one conductive metal as described, e.g., at page 15, lines 1-11 of the present application. Claims 2-4 have been amended to correct minor informalities while Claim 7 has been amended into independent form.

Additionally, Claims 8 and 9 introduced herein find support at the top of page 10 of the present application while Claim 10 finds support on pages 12-13 and in Fig. 2, and Claims 11 and 12 finding support on pages 10 and 11 of the specification. Accordingly, the Amendment to the claims herein finds clear support throughout the present application and drawings.

Claim 1 has been rejected under 35 U.S.C. §102 as being anticipated by U.S. Pat. No. 4,901,738 to Brink et al in paragraph 3 of the Office Action while Claims 1-5 have been rejected as being anticipated by JP 02082696 to Oike et al in paragraph 4 of the Office Action and Claims 1 and 7 rejected as anticipated by JP 2000273762 to Motogami et al in paragraph 5 of the Office Action. Additionally, Claim 6 has been rejected under 35 U.S.C. §103 as obvious over Oike et al in view of U.S. Pat. No. 5,532,052 to Eng et al in paragraph 7 of the Office Action.

Motogami et al were published after the priority date of the present application. Accordingly, the verified English translation of the priority Japanese application enclosed herewith eliminates Motogami et al. as a reference. In this regard, Claim 7 has been amended into independent form and should now be allowable. However, it is respectfully submitted that the invention recited in all claims pending herein is in condition for allowance, for the following reasons.

As pointed out above, the present invention is directed to a three-dimensional knitted base material forming a fibrous structure base in electromagnetic wave shielding material and composed of upper and lower ground structures interconnected by thread. A conductive metal layer on the shielding material is formed by plating the knitted material. The claimed invention provides the processing improvements described in the background portion of the present application and

explicitly documented in the comparative testing presented in Table 1 on page 24. In particular, separation of coating metal is suppressed while cutting debris generated during manufacture is reduced. Shielding improves while compressive stress is reduced.

The features of the presently claimed invention together with the accompanying advantages attained thereby are not taught or suggested by the applied art for the following reasons.

As acknowledged in paragraph 3 of the Office Action, Brink et al teach a laser shield having a metal layer 14 adhering to a fabric sheet 12. As shown in the drawings, the fabric sheet 12 and metal layer 14 are each in the form of independent plain sheets, with threads at the inner portion of the fabric layer 12 not contacting the metal sheet 14. In Brink et al, any conductivity occurs in the vertical direction due to the presence of the fabric sheet 12.

In contrast, in the present invention, yarns constituting the three-dimensional knitted material are metallized. In other words, the inner portion of the material is also metallized and thus the product exhibits conductivity in all directions, not only transversely but also vertically. Moreover, Brink et al fail to disclose any three dimensional material but only show two dimensional fabric sheets. Therefore, Brink et al fail to disclose any three dimensionally knitted base material composed of an upper ground structure, a lower ground structure and connection thread interconnecting the same.

The sole claim of Oike et al states

A metal thin film laminate structure comprising a non-conductive base material, both surfaces of said base material having each a thin metal layer.

One of the thin metal layers is separated from another metal layer by the non-conductive base material, as in Brink et al. No other embodiments are disclosed in this reference. Thus, Oike et al neither disclose nor suggest the three dimensionally knitted base material composed of an upper ground structure, a lower ground structure and interconnection thread. Furthermore, it is stated in Oike et al

The thin metal layers (2) are formed onto both surfaces of the non-conductive base material by vacuum deposition, spattering, ion-plating or the like in the presence or absence of the primer layer (3).

Thus, Oike et al intend to form two independent metal layers on both surfaces of the non-conductive base material. Vacuum deposition, spattering and ion-plating are exemplified together with the typical use of a metal foil. The examples in Oike et al. only disclose PET film as the nonconductive base material. Furthermore, there is no comment about Claims 2-5 in paragraph 4 of the Office Action; accordingly, it is clear these claims define over Oike et al.

Regarding Claim 6, Eng et al disclose a Raschel structure in which the yarn contains metal fibers, to provide a camouflage material having radar screening effect. The film of Oike et al, typically composed of three film layers such as metal foil-PET film-metal foil, means that Oike et al does not require any screening effect. Thus,

there is no logical reason why one skilled in the art would combine the teachings of Oike et al and Eng et al.

Accordingly, in view of the forgoing amendment and accompanying remarks, it is respectfully submitted that all claims pending herein are in condition for allowance. Should the Examiner have any questions, then it is respectfully requested that the undersigned attorney be contacted at the earliest convenience to discuss the present application. A petition for an automatic one month extension of time for response under 37 C.F.R. §1.136(a) is enclosed in triplicate together with the requisite petition fee.

Early favorable action is earnestly solicited.

Respectfully submitted,



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